



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,036	07/05/2001	Mark Leslie Smythe	36677.29	3406
27683	7590	03/28/2007		
HAYNES AND BOONE, LLP			EXAMINER	
901 MAIN STREET, SUITE 3100			KAM, CHIH MIN	
DALLAS, TX 75202				
			ART UNIT	PAPER NUMBER
			1656	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE		DELIVERY MODE
3 MONTHS		03/28/2007		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/806,036	SMYTHE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chih-Min Kam	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 16 January 2007.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 8-19,32-35,39,40 and 44-52 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 32-35,39,40,51 and 52 is/are allowed.

6)  Claim(s) 8-19 and 44-50 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application  
6)  Other:

**DETAILED ACTION**

***Status of the Claims***

1. Claims 8-19, 32-35, 39, 40 and 44-52 are pending.

Applicants' amendment filed on January 16, 2007 is acknowledged. Applicants' response has been fully considered. Claims 8, 19, 32 and 33 have been amended. Thus, claims 8-19, 32-35, 39, 40 and 44-52 are examined.

**Withdrawn Claim Rejections - 35 USC § 112**

2. The previous rejection of claims 8, 12-19 and 44-50 under 35 U.S.C. 112, first paragraph, written description, is withdrawn in view of applicant's response at pages 16-18 of the amendment filed January 16, 2007.

3. The previous rejection of claims 8-19 and 44-50 under 35 U.S.C. 112, second paragraph, regarding lacking essential steps to synthesize cyclic peptide or peptidomimetic compound of General Formula II or the term "substituted alkyl, .....substituted heteroaryl" in R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup>, is withdrawn in view of applicant's amendment to the claims, and applicant's response at pages 18-19 of the amendment filed January 16, 2007.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8-19 and 44-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 8-19 and 44-50 are indefinite because the claim recites a method of synthesis of a cyclic peptide or peptidomimetic compound of General Formula I or General Formula II, where the compound of General Formula I or General Formula II does not contain A1 or A2 group, however, the claim also indicates the method comprises steps (a)-(c) and optionally step (d), where step (d) is the step of removing A1 and A2. Thus, it is not clear whether the final compound of General Formula I or General Formula II would be obtained if the step (d) is optional. Claims 9-19 and 44-50 are included in the rejection because they are dependent on rejected claims and do not correct the deficiency of the claim from which they depend.

6. Claims 11 and 12 are indefinite because the independent claim (i.e., claim 8) recites a method of synthesis of a cyclic peptide or peptidomimetic compound of General Formula I or General Formula II, where the compound of General Formula I or General Formula II does not contain A1 or A2 group, however, claims 11 and 12 recite A1 and/or A2 left attached to the peptide.

7. Claim 18 is indefinite because of the use of the term “A2 is an irreversible substituent”, which is not consistent with the limitation for compound of General Formula I or General Formula II cited in claim 8.

8. Claims 46 and 48 are indefinite because the structures of A2 in the claim contain an NH<sub>2</sub> group, it is not clear where is the site for A2 to attach to the peptide.

Response to Arguments

Applicants indicate the structures in the claims do show an NH-group. Thus, the structures again represent the system prior to ring contraction, i.e., the peptide with auxiliary attached. Claims 46 and 48 are respectively directly and indirectly dependent on claim 8.

Because general formulae III-V show A2 attached to the peptide P, claims 46 and 48 are fully consistent with, and properly dependent upon, claim 8 (pages 19-20 of the response).

Applicants' response has been considered, however, the arguments are not fully persuasive because if the structure of A2 represents the system prior to ring contraction, A2-P, where is the attachment of A2 on the peptide if A2 contains an NH<sub>2</sub> group.

***Conclusion***

9. Claims 8-19 and 44-50 are rejected. It appears claims 32-35, 39, 40 and 51-52 are free of art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

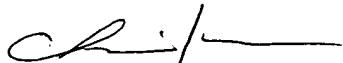
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Bragdon can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1656

Chih-Min Kam, Ph. D.

Primary Patent Examiner



CHIH-MIN KAM  
PRIMARY EXAMINER

CMK

March 23, 2007